

Figure 1.

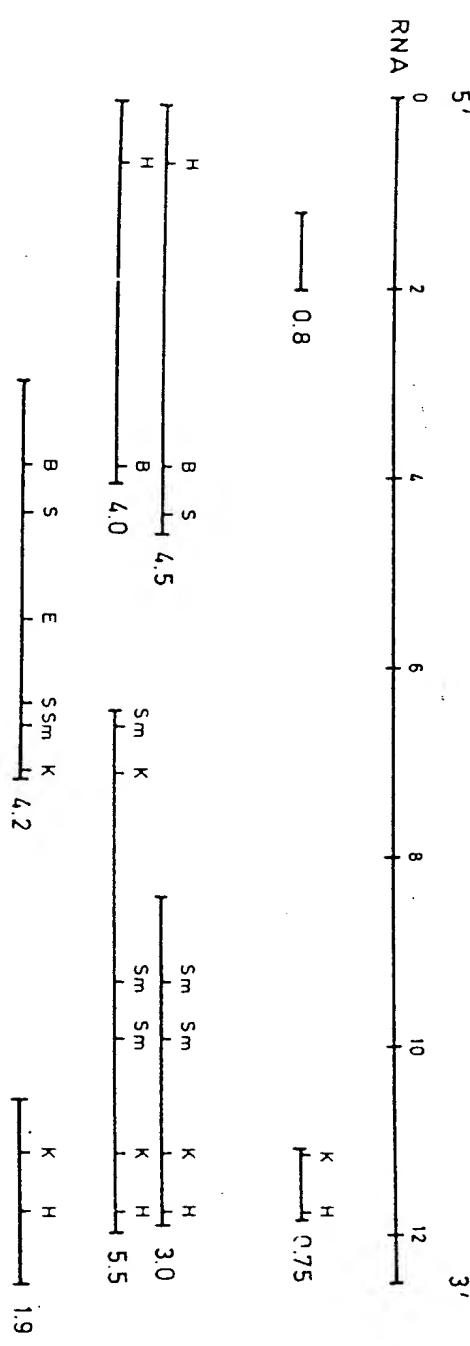


Figure 2.

1 GTT AGC TCT TTC TCG TAT ACC ATA TTG GAT ACA CTA ATT TTC GAT TTG GTC TAG GGC ACC CCT CCA GCG ACG GCG ACG GAA ATG GGC 84
 85 TAG CCA TGC CCA TAG TAG GAC TAG CAA ACG GAG GGA CTA GTC GCG AGC TCC CTC GGT GGT CTA ATG CCT GAG TAC AGG C 164
 169 ACA GTC GTC AGT TCG AGC TGA GCA CTA GCC CAC CTC GAG ATG CTA CGT GGA CGA GGG CAT GCC CAA GAC ACA CCT TAA CCC 252
 253 TGG CGG GGG TCG CTA GGG TGA ATT CAC ATT ATG TGA TGG GGG TAC GAC CTG ATA CGG TGC TGC AGA GGC CCA CTA GCA GGC TAG 336
 337 TAT AAA AAT CTC TGC TGT ACA TGG CAC ATG GAG TTG ATT CAT TTT GAA TTA TTA TAC AAA ACA AGC AAA CAA AAA CCA GTG GGA
 1 Met Glu Leu Asn His Phe Glu Leu Tyr Lys Thr Ser Lys Cln Lys Pro Val Gly 19
 421 GTG GAG GAA CCG GTG TAT GAC ACC GGC AGG AGA CCA CTA TTT GGG AAC CCA ATG GAG GTC CAA TCA ACG CTG AAG CTG 504
 20 Val Glu Glu Pro Val Tyr Asp Thr Ala Gly Arg Pro Leu Phe Glu Asn Pro Ser Glu Val His Pro Glu Ser Thr Lys Leu 47
 48 CCA CAC GAC AGG GGG AGA GGA GAT ATC AGA ACA CTC AGG GAC CTA CCC AGG AAA GGT GAC TAT AGG AGT GGC AAC CAT CTA 588
 48 Pro His Asp Arg Gly Arg Gly Asp Ile Arg Thr Thr Leu Arg Asp Leu Pro Arg Lys Glu Asp Cys Arg Ser Gly Asn His Leu 75
 569 GGC CGG GTT AGT GGG ATA TAC ATA AAG CCC GGC CCT GTC TAC TAT CAG GAC TAC AGC GGC TAT CAC AGA GCT CCT TTA 672
 76 Gly Pro Val Ser Gly Ile Tyr Ile Lys Pro Glu Pro Val Tyr Tyr Glu Asp Tyr Thr Gly Pro Val Tyr His Arg Ala Pro Leu 103
 673 GAG TTC TTT GAT GAG GCC CAG TTC TGC GAG GTG ACT AAG AGA ATA GGC AGG GTC ACG GGT AGT GAT GGT ATA GTC CAC ATA 756
 104 Glu Phe Pro Asp Glu Ala Glu Phe Cys Glu Val Thr Lys Arg Ile Glu Asp Val Thr Gly Ser Asp Glu Lys Leu Tyr His Ile 111
 757 TAT GTG TGC GTC GAT GGT TGC ATA CTG CTG AAA TTA GCC AAA AGG GAC ACA CCC AGA ACC CTA AAG TGG ATT AGG AAC TTC ACC 840
 112 Tyr Val Cys Val Asp Glu Cys Ile Leu Lys Leu Ala Lys Arg Gly Thr Pro Arg Thr Leu Lys Trp Ile Arg Alan Phe Thr 159
 841 AAC TGT CCA TTA TGG GTC GAT GGT TGC ATA CTG CTG AAA TTA GCC AAA AGG GAT AAG CCA GAC AGA ATG AAC AAA GGT 924
 160 Asn Cys Pro Leu Trp Val Thr Ser Cys Ser Asp Glu Ala Ser Glu Ser Gly Ser Lys Asp Lys Pro Asp Arg Met Asn Lys Glu 167
 925 AAG TTG AAG ATA GCC CCA AGA GAG CAT GAG AAG GAC AGC AAG ACC AAG CCT GAT GCA ACG ATT GTC GAA GAG GGA GAA AAA 1004
 188 Lys Leu Lys Ile Ala Pro Arg Glu His Glu Lys Asp Ser Lys Thr Lys Pro Pro Asp Ala Thr Ile Val Val Glu Glu Val Lys 215
 1009 TAC CAA ATC AAA AAG AAA GTC AAA GCA GAC ACA CAA GCA GAC GGC GGC AAC AAC ACA CCA CCA GAG TCC 1092
 216 Tyr Glu Ile Lys Lys Lys Lys Lys Val Lys Glu Lys Asn Thr Glu Asp Glu Leu Tyr His Asn Lys Asn Lys Pro Pro Glu Ser 243

1093 AGG AAG AAA CTA GAA AAA GCC CTG TTG GCT TGG GCG GTC ATA ACA ATC TTG CTG TAC CAG CCT GTC GCA GGC GAG AAC ATA ACT 1176
244 Arg Lys Lys Leu Glu Lys Ala Leu Leu Ala Trp Ala Val Ile Thr Ile Leu Leu Tyr Glu Pro Val Ala Ala Glu Asn Ile Thr 271

1177 CAA TGG AAC CTC ACT GAC AAC GGC ACT ATC GGT ATT CAG CGA GCC ATG TAT CTT AGA GGG GTC AAC AGG TTA CAT GGA ATC 1260
272 Glu Trp Asn Leu Ser Asp Asn Glu Thr Asn Glu Ile Glu Arg Ala Met Tyr Leu Arg Glu Val Asn Arg Ser Leu His Glu Ile 299

1261 TGG CCC GAG AAA ATA TGC AAG GGG GTC CCC ACT CAT CTG GCC ACT GAC ACG GAA CTG AAA GAG ATA CGC GGG ATG ATG GAT GCC 1344
300 Trp Pro Glu Lys Ile Cys Lys Glu Val Pro Thr His Leu Ala Thr Asp Thr Glu Leu Lys Glu Ile Arg Glu Met Met Asp Ala 327

1345 AGC GAG AGC ACA AAC TAT ACG TGC TGT AGC TTA CAA AGA CAT GAA TGG AAC AAA CAT GGA TGG TGT AAC TGG TAC AAC ATA GAC 1428
328 Ser Glu Arg Thr Asn Tyr Thr Cys Cys Arg Leu Glu Asn Arg His Glu Trp Asn Lys His Glu Trp Tyr Asn Ile Asp 355

1429 CCT TGG ATT CAG TTA ATG AAC AGG ACC CAA ACA ATT TTG ACA GAA GGC CCT CCA GAT AAC GAG TGT GCC GTG ACC TAC AGG TAT 1512
356 Pro Trp Ile Glu Leu Met Asn Arg Thr Glu Thr Glu Glu Pro Pro Asp Lys Glu Cys Ala Val Thr Cys Arg Tyr 363

1513 GAC AAA ATT ACC GAT GTC AAC GTC GTC ACC CAG GCC AGG ATT AGG CCA ACT ACT CTG ACT GGC TGC AUG AAA GGC AAA AAC TTT 1596
384 Asp Lys Asn Thr Asp Val Asn Val Thr Glu Ala Arg Asn Arg Pro Thr Thr Leu Thr Glu Cys Lys Lys Glu Lys Asn Phe 411

1597 TCA TTC GCA AGC ACA GTC ATA GAG GGC CGG TGC ATT TTC AAC GTC GTC GAG GAC ATC TTA TAC GAA GAC CAT GAG TGT GGC 1680
412 Ser Phe Ala Glu Thr Val Ile Glu Glu Pro Cys Asn Phe Asn Val Ser Val Glu Asp Ile Leu Tyr Glu Asp His Glu Cys Glu 439

1681 AGT CTG CTC CAG GAC ACC GCT CTG TAC CTA TTG GAT GGA ATT GCA ATG ACC AAC ACT ATA GAG ATT GCA AGG CAA GGT GGC CGG CGG GTG 1764
440 Ser Leu Leu Glu Asp Thr Ala Leu Tyr Leu Asp Glu Met Thr Asn Thr Ile Glu Asn Ala Arg Glu Ala Ala Arg Val 467

1765 ACA TCT TGG CCT CGG AGG CAG CTC AGT ACC GCA GGG AAG CTA GAG AGG AGA AGC AAA ACC TGG TTT GGT GCC TAT GCC CTC 1848
468 Thr Ser Trp Leu Glu Arg Glu Leu Ser Thr Ala Glu Lys Lys Leu Glu Arg Arg Ser Lys Thr Trp Phe Glu Ala Tyr Ala Leu 495

1849 TCA CCT TAC TGC ATT GTC ACT AGA AAA ATA GGG TAC ATA TGG TAT ACA AAC AAC TGC ACC CGG QCA TGC CTC CCT AAG AAC ACA 1932
496 Ser Pro Tyr Cys Asn Val Thr Arg Lys Ile Glu Tyr Ile Trp Tyr Thr Asn Asn Cys Thr Pro Ala Cys Leu Pro Lys Asn Thr 523

1933 AAA ATA ATA CGC CCT GGA AAG TTT GAC ACC ATT GCG GAA GAC GGG AGG ATC CTT CAT GAA ATG GGG GGC CAC CTA TCA GAA TTT 2016
524 Lys Ile Ile Glu Pro Glu Lys Phe Asp Thr Asn Ala Glu Asp Glu Lys Ile Leu His Glu Met Glu Glu His Leu Ser Glu Phe 551

2017 TTG TTC CTT CTC CTA GTC ATT GAC ACC CTA TAC CTC ATT TTA CAC TAT GCA ATC CCC CCC CCC CCC CCC CCC CCC CCC CCC 2100
552 Leu Leu Ser Leu Val Ile Leu Ser Asp Phe Ala Pro Glu Thr Ala Ser Thr Leu Ile Leu His Tyr Ala Ile Pro 579

2101 CAG TCC CAC GAA CCT GAA GGT TGT GAT ACG AAC CAA CTT AAC CTA ACA GTG AAA CTT AGG ACA GAA GAC GAA GTG CCA TCA 2104
580 Glu Ser His Glu Glu Pro Glu Glu Cys Asp Thr Asn Glu Leu Asn Leu Thr Val Lys Leu Arg Thr Glu Asp Val Val Pro Ser 607

2105 TCA GTC TGG AAT ATT GGC AAA TAT GTC TGT GTC AGA CCA GAC TGG TGG CCG TAT AAA GTC QCT CTC CTC TTT GAA GAG 2264
608 Ser Val Trp Asn Ile Gly Lys Tyr Val Cys Val Arg Pro Asp Trp Trp Pro Tyr Glu Thr Lys Val Ala Leu Leu Phe Glu Glu 635

2269 GCA GGA CAG GTC ATA AAG CTA GTC CTA CGG GCA CTC AGG GAT TTA ACT AGG GTC TGG AAC AGC GCA TCA ACT ACT GCG TTT CTC 2352
636 Ala Gly Glu Val Ile Lys Leu Val Leu Arg Ala Leu Arg Asp Leu Thr Arg Val Trp Asn Ser Thr Ala Ser Thr Ala Phe Leu 663

2353 ATT TGC TTG ATA AAA GTC TTG AGA CAG GTC GTC CAA GGT ATA ATA TGG CTC CTC GTC ACC AAC GCA CAA GGG CGG CTA 2436
664 Ile Cys Leu Ile Lys Val Leu Arg Gly Glu Val Val Glu Gly Ile Ile Trp Leu Leu Val Thr Glu Ala Glu Gly Arg Leu 691

2437 GCC TGT AAG GAA GAC TAC AGG TAT GCG ATC TCA ACC AAT GAG ATA GGG CTC ACT GCA GGG GCT GAA GGT CTC ACC ACT ACC TGG 2520
692 Ala Cys Lys Glu Asp Tyr Arg Tyr Ala Ile Ser Ser Thr Asn Glu Ile Glu Leu Leu Glu Ala Glu Glu Leu Thr Thr Thr Trp 719

2521 AAA GAA TAC AGC CAC GGT TTG CAG CTG GAC GAC ACC GTC ATT AGG GCC dTC TGC ACT GCA GGG TCC TTT AAA GTC ACA GCA CTT 2604
720 Lys Glu Tyr Ser His Glu Leu Glu Leu Asp Asp Glu Thr Val Lys Ala Val Cys Thr Ala Glu Ser Phe Lys Val Thr Ala Leu 747

2605 AAC GTC GTC AGT AGG TAT CTA GCA TCA TTG CAC AGG GCT CTA CCC ACC TCA GTC ACA TTT GAG CTC CTA TTT QAC GGG 2686
748 Asn Val Val Ser Arg Arg Tyr Leu Ala Ser Leu His Arg Ala Leu Pro Thr Ser Val Thr Phe Glu Leu Phe Asp Glu 775

2689 AAC AAC CCA GCA ATC GAG GAG ATG GAA GAT GAC TTC GCA TTT GAC AGC AGT CCT GTG ATC AAA GGG AAG 2772
776 Thr Asn Pro Ala Ile Glu Met Asp Asp Phe Glu Cys Pro Phe Asp Thr Ser Pro Val Ile Lys Glu Lys 803

2773 TAC AAC ACC ACT TTG TTA AAC GGC AGT GCT TTC TAT CTA GTC TGC CCA ATA GGA TGC ACT GGT GTC GTC ACA GCA GTG 2856
804 Tyr Asn Thr Thr Leu Leu Asn Glu Ser Ala Phe Tyr Leu Val Val Cys Pro Ile Glu Trp Thr Glu Val Glu Cys Thr Ala Val 831

2857 AGC CCC ACA ACC TTG AGA ACA GAA GTC GTG AAA ACC TTC AGG AGA GAT AAG CCT TTT CCA CAT AGA GTC GAC TGT ACC ACC 2940
832 Ser Pro Thr Thr Leu Arg Thr Glu Val Val Lys Thr Phe Arg Arg Asp Lys Pro Phe Pro His Arg Val Asp Cys Val Thr Thr 859

2941 ATA GTC GAA AAA GAA GAC CTA TTC CAT TGC AAG TTG GGG GGT AAT TGG ACA TGT GTC AAA GGC GAC CCA GTC ACT TAT AAG GGG 3024
860 Ile Val Glu Lys Glu Asp Leu Phe His Cys Lys Leu Glu Glu Asn Trp Thr Cys Val Lys Glu Asp Pro Val Thr Tyr Lys Glu 887

1025 GGG CAA GTC AAG CAG TGC AGG TGG TGT GGT TTT GAG CTC CCA CAC TAC CCT ATA GGC AAG TGC ATC 3104
888 Gly Glu Val Lys Glu Cys Arg Trp Cys Glu Phe Glu Pro His Tyr Pro Ile Glu Pro His Tyr Pro Ile Glu Phe Lys Cys Ile 915

3109 CTA ACA AAT GAG ACA GGT TAC AGG GTC GAA GAT TCC ACA GAC TGC AAC AGA GAT GGC GTC GTC ATT AGC ACT GAA GGG GAA CAT 3192
916 Leu Thr Asn Glu Thr Gly Tyr Arg Val Val Asp Ser Thr Asp Cys Asn Arg Asp Gly Val Val Ile Ser Thr Glu Gly Glu His 943

3193 GAG TGC TTG ATT GGC AAC ACT ACC GTC AAG GTG CAT GCA CTG GAT GAA AGA TTG GGC CCT ATG CCA TGC AGA CCC AAA GAA ATC 3276
944 Glu Cys Leu Ile Gly Asn Thr Thr Val Lys Val His Ala Leu Asp Glu Arg Leu Glu Pro Met Pro Cys Arg Pro Lys Glu Ile 971

3277 GTC TCT AGT GAG GGA CCT GTC AGG AAA ACT TCT TGT ACA TTC AAC TAC ACA AAG ACT CTA AGA AAC AAA TAC TAT GAG CCC AGA 3360
972 Val Ser Ser Glu Gly Pro Val Arg Lys Thr Ser Cys Thr Phe Asn Tyr Thr Lys Thr Leu Arg Asn Lys Tyr Tyr Glu Pro Arg 999

3361 GAC AGT TAC TTC CAG CAA TAT ATG CTC AAG GGC GAG TAT CAA TAC TGG TTT ATT CTG GAC GTC ACC GAC CAC ACA GAC TAC 3444
1000 Asp Ser Tyr Phe Glu Glu Tyr Met Leu Lys Glu Glu Tyr Glu Tyr Trp Phe Asn Leu Asp Val Thr Asp His His Thr Asp Tyr 1027

3445 TTT GCC GAG TTT GTC TTG GTC GAA GCA CTC TTA GGA GGA AGA TAC GTC ATT CTA ATA GTC ACC TAC ATA ATT CTA 3528
1028 Phe Ala Glu Phe Val Val Leu Val Ala Leu Leu Glu Arg Tyr Val Leu Trp Leu Ile Val Thr Tyr Ile Ile Leu 1055

3529 ACA GAG CAG CTC GCT GCT GGT CTA CAG CTC GTC GAC CAA GGT GAG GTC GTC ATT GGG AAC CTA ATT ACC CAC ACG GAC AAT GAG 3612
1056 Thr Glu Glu Leu Ala Ala Glu Leu Glu Val Val Ile Glu Glu Glu Val Val Ile Glu Asn Leu Ile Thr His Thr Asp Asn Glu 1083

3613 GTC GTC TAC TTC CTC CTC TAC TTA GTC ATA AGA GAT GAG CCC ATA AAG AAA TGG ATA CTA CTG CTG TTT CAT GCA ATG 3696
1084 Val Val Val Val Tyr Phe Leu Leu Val Ile Arg Asp Glu Pro Ile Lys Trp Ile Leu Leu Leu Phe His Ala Met 1111

3697 ACT AAC AAT CCA GTC AGG ACC ATA ACA GTC GCA TTG CTA ATG ATC AGT GGG GTC GCC AAG GGT GGT AAG ATA GAT GGT GGC TGG 3780
1112 Thr Asn Asn Pro Val Lys Thr Ile Ser Gly Val Ala Lys Glu Lys Glu Lys Lys Asp Glu Ile Asp Glu Glu Trp 1139

3781 CAG AGA CAA CCG GTC ACC AGT ATT GAC ATC CAA CTC GCA CTC GCA GTC GTC GTC ATT GTC ATT GTC ATT GTC ATT GTC ATT GTC ATT GCA 3864
1140 Glu Arg Glu Pro Val Thr Ser Phe Asp Ile Glu Ala Leu Ala Val Val Val Val Met Leu Leu Ala Lys Arg Asp 1167

3865 CCG ACT ACT TTC CCT TTG GTC ATC ACA GTC GCA ACC CTC AGA AGC GTC AAC AAC GGT ATT AGC ACA GAT CTA GTC ATA 3948
1168 Pro Thr Thr Phe Pro Leu Val Ile Thr Val Ala Thr Leu Arg Thr Ala Lys Ile Ser Asp Tyr Tyr Lys Thr Asn Glu Phe Ser Thr Asp Leu Val Ile 1195

3949 GCC ACA GTC TCG GCA GCT TTG TTA ACT TGG ACC ATT ATC AGC GAC TAC TAC AAA TAC AAG ACT TGG CTA CAG TAC CTC GTC AGC 4032
1196 Ala Thr Val Ser Ala Ala Leu Leu Thr Trp Thr Tyr Ile Ser Asp Tyr Tyr Lys Thr Asn Glu Phe Ser Thr Asp Leu Val Ile 1223

4033 ACG GTG ACT GGA ATC TTC CTG ATA AGG GTC AAG GGA ATA AAC GAA TTG GAT CTC CAC GCC CCA ACC TTG CCA TCT CAC AGA 4116
1224 Thr Val Thr Gly Ile Phe Leu Ile Arg Val Leu Lys Glu Ile Glu Leu Asp Leu Asp Pro Thr Leu Pro Ser His Arg 1251

4117 CCC CTC TTT TAC ATC CTT GTC TAC CTT ATT TCC ACT GCC GTG GTC ACT AGA TGG AAT CTC GAC GTC GAA GGA TTG TTG CTC CAG 4200
1252 Pro Leu Phe Tyr Ile Leu Val Tyr Leu Ile Ser Thr Ala Val Val Thr Arg Trp Asn Leu Asp Val Ala Gly Leu Leu Leu Gln 1279

4201 TGC GTC CCA ACT CTT TTA ATG GTC TTT ACG ATG TGG GCA GAC ATT CTC ACC CTA ATT CTC ATA CCT ACT TAT GAG TTA ACA 4284
1260 Cys Val Pro Thr Leu Leu Met Val Val Thr Met Trp Ala Asp Ile Leu Thr Leu Ile Leu Pro Thr Tyr Gln Leu Leu Thr 1307

4245 AAG TTA TAC TAC CTT AAG GAA GTG AAG ATT GGG GCA GAA AGA GGT TGG CTG TGG AAA ACT AAC TAT AAG AGG GTC AAC GAC ATC 4366
1308 Lys Leu Tyr Tyr Leu Lys Glu Val Lys Ile Gly Ala Glu Arg Gly Trp Leu Trp Lys Thr Asn Tyr Lys Arg Val Asn Asp Ile 1335

4369 TAC GAG GTC GAC CAA ACT AGC GAA GGG GTC TAC CTT CCT TTC CCT TCT AAA CAG AGG ACG AGC GCT ATA ACT AGT ACC ATG TTG CCA 4452
1336 Tyr Glu Val Asp Glu Thr Ser Glu Gly Val Tyr Leu Phe Pro Ser Lys Glu Arg Thr Ser Ala Ile Thr Ser Thr Met Leu Pro 1363

4453 TTA ATC AIA GCC ATA CTC ATT AGC TGC ATC AGC AAC AAG TGG CAA CTC ATA TAC TTA CTG TAC TAC TTG ATA TTT GAA GTC TCT TAC 4536
1364 Leu Ile Lys Ala Ile Leu Ile Ser Cys Ile Ser Asn Lys Trp Glu Leu Ile Tyr Leu Leu Tyr Leu Ile Phe Glu Val Ser Tyr 1391

4537 TAC CTC CAC AAG AAA GTT ATA GAT GAA ATA GCT GGT GGG ACC AAC TTC GTT TCA AGG CTC GTC GCT GCT TTG ATT GAA GTC AAT 4620
1392 Tyr Leu His Lys Lys Val Ile Asp Glu Ile Ala Gly Thr Asn Phe Val Leu Leu Ser Arg Leu Val Ala Asn Leu Ile Glu Val Asn 1419

4621 TGG GCC TTC GAC AAT GAA GAA GTC AAA GGC TTA AAG AAG TTC TTC TTG CTG TCT AGT AGG GTC AAA GAG TTG ATC ATC AAA CAC 4704
1420 Trp Ala Phe Asp Asn Glu Val Lys Glu Leu Lys Phe Leu Leu Ser Arg Val Leu Ile Lys Glu Leu Ile Ile Lys His 1447

4705 AAA GTC AGG AAT GAA GTC GTC GCG TGC TGG ATT TAT GGG ATG CCA AGG CTG ATC GGC TTA TTG ATT GAA GTC AAT GCA 4786
1448 Lys Val Arg Asn Glu Val Val Val Arg Trp Phe Gly Asp Glu Glu Ile Tyr Gly Met Pro Lys Leu Ile Glu Leu Val Lys Ala 1475

4789 GCA ACA CTA ATG AGA AAC AAA CAC TGT ATG TTG TGT ACC GTC TGT GAA GAC AGA GAT TGG AGA GGG GAA ACT TGC CCT AAA TGT 4872
1476 Ala Thr Leu Ser Arg Asn Lys His Cys Met Leu Cys Thr Val Cys Glu Asp Arg Asp Trp Arg Gly Glu Thr Cys Pro Lys Cys 1503

4873 GGG CGT TTT GGA CCA CCA GTC TGC AGT ATG ACC CTA GCC GAT TTC GAA GAA AAA CAC TAT AAA AGG ATT TTC ATT AGA GAG 4956
1504 Gly Arg Phe Gly Pro Val Val Cys Glu Met Thr Leu Ala Asp Phe Glu Glu His Tyr Lys Arg Ile Phe Ile Arg Glu 1531

4957 GAC CAA TCA GGC AGG CCA CTT AGA GAG GAG CAT GCA GGG TAC TTA CAG TAC TAC AAA GCC AGG AGT CAA CTG TTT TTG AGG AAC CTC 5040
1532 Asp Gln Ser Gly Gly Pro Leu Arg Glu Glu His Ala Gly Tyr Leu Glu Tyr Lys Ala Arg Gly Glu Leu Phe Leu Arg Asn Leu 1559

5041 CCA GTC TTA GCT ACA AAA GTC AAA GTC GGG ACA GAG ATT GGG GAT CTC GTC GGG ACA CAC CTT GGC TGG GTG 5124
1560 Pro Val Leu Ala Thr Lys Val Lys Met Leu Val Gly Asn Leu Gly Thr Glu Ile Gly Asp Leu Glu His Leu Gly Trp Val 1567

5125 CTT AGA GGG CCA GCT GTT TGC AAC GAT ACT GAA TGC ACC GAC GAA AGA TGC ACC GAC TCT ATA ATG GAT AAC TTG ACT GCT TTC TTT
5206 1588 Leu Arg Gly Pro Ala Val Cys Lys Val Thr Glu His Glu Arg Cys Thr Thr Ser Ile Met Asp Lys Leu Thr Ala Phe Phe 5206
1615 1616 Gly Val Met Pro Arg Gly Thr Pro Arg Ala Pro Val Arg Phe Pro Thr Ser Leu Lys Ile Arg Arg Gly Leu Glu Thr 1615
5292 5293 GGT TGG GCT TAC ACA CAC CAA GGT GGC ATC AGC TCA GTA GAC CAT GTC ACT TGT GGG AAA GAC TTA CTG GTG TGT GAC ACC ATG
5292 1644 Gly Trp Ala Tyr Thr His Glu Gly Ile Ser Ser Val Asp His Val Thr Cys Gly Lys Asp Leu Leu Val Cys Asp Thr Met 1643
5376 5377 GGT CGG ACA AGG GTT GTC CAG TCA ATAT AAT AAG ATG ACC GAC GAG TCC GAA TAC GGA GTC AAA ACT GAC TCC GGG TGC CCA
5376 1672 Gly Arg Thr Arg Val Val Cys Gin Ser Asn Asn Lys Met Thr Asp Glu Ser Glu Tyr Gly Val Lys Thr Asp Ser Gly Cys Pro 1671
5460 5461 GAG GAA ACC AGG TGT TAC GTC TTT AAC GCG GAA GCA GTT AAC ATA TCA GGC ACT AAA GGA GCC ATG GTC GAC TTA CAG AAA ACC
5460 1700 Glu Gly Ala Arg Cys Tyr Val Phe Asn Pro Glu Ala Val Asn Ile Ser Glu Thr Lys Gly Ala Met Val His Leu Glu Lys Thr 1727
5624 5625 GGT GGA GAA TTC ACC TGT GTG ACA GCA TCA GGA ACC CCG GCC TTC TTT GAC CTC AGG AAC CTT AAG GGC TGG TCA GGG CTA CCC
5624 1728 Gly Gly Glu Phe Thr Cys Val Thr Ala Ser Gly Thr Pro Ala Phe Asp Leu Lys Asn Leu Lys Gly Trp Ser Gly Leu Pro 1755
5712 5629 ATA TTT GAA GCA TCA AGT GGA AGG GTC GGA AGG GTC AGG GTC GGG AAG AAC GAG GAT TCC AAA CCA ACC AAG CTC ATG AGT
5712 1756 Ile Phe Glu Ala Ser Ser Gly Arg Val Val Gly Arg Val Lys Val Gly Lys Asn Glu Asp Ser Lys Pro Thr Lys Leu Met Ser 1761
5796 5797 GGG ATA CAA AGC GTT TCT AAA AGC GGC ACA GAC TGA AGC ATG ATG AAG AAC ATA AGC ACC ATG AAC AGG GGA GAG TTC AGA
5796 1784 Gly Ile Glu Thr Val Ser Ala Ser Ala Thr Asp Leu Thr Glu Met Val Lys Lys Ile Thr Met Asn Arg Gly Glu Phe Arg 1611
5800 5801 TTG ATC CCC TTG AGG GCG GCA GCA GAA TCA GTA TAC CAA TAC ATA AGA CAG AAA CAT CCG ATG ATA GCA TTC AAT CTA
5800 1840 Leu Val Ile Pro Leu Arg Ala Ala Glu Ser Val Ile Glu Glu Ile Glu Glu Ile Gly Arg His Lys His Pro Ser Ile Ala Phe Asn Leu 1839
6048 5965 5966 AGG ATA GGT GAG ATG AAC GAA GGT GAT ATG GCC AGG GGA ATA ACC TAT GCT TCT TAC GGT TAC TTT TGC CAG ATG TCA CAA CCC
6048 1868 Arg Ile Gly Glu Met Lys Glu Gly Asp Met Ala Thr Gly Ile Thr Tyr Ala Ser Tyr Gly Tyr Phe Cys Glu Met Ser Gin Pro 1895
6132 6049 AAG CTC AGA GCC GCA ATG GTC GAA TAT TCC TTT ATA TTC CTA GAT GAG TAT CAT TGT GCT ACC CCA GAA CAA CTC GCA ATC ATG
6132 1896 Lys Leu Arg Ala Met Val Glu Tyr Ser Phe Ile Phe Leu Asp Glu Tyr His Cys Ala Thr Pro Glu Glu Leu Ala Ile Met 1923

6133 GGG AAG ATC CAC AGA TTC TCA GAA AAC CTC CGG GTG GCA GGC ACA GCG ACA CCG GCA GGC ACA GCA GAA GCA GGG ACT GGG ACC ACT GGG CAG 6216
1924 Lys Ile His Arg Phe Ser Glu Asn Leu Arg Val Ala Met Thr Ala Thr Pro Ala Gly Thr Val Thr Thr Gly Gln 1951
6217 AAA CAC CCT ATA GAG GAA TTT ATA GCC CGG GAA GTG ATG AAA GGA GAA GAC TTG GGT TCT GAG TAC TTA GAT ATT GCC GGA CTG 6300
1952 Lys His Pro Ile Glu Glu Phe Ile Ala Pro Glu Val Met Lys Glu Asp Leu Gly Ser Glu Tyr Leu Asp Ile Ala Gly Leu 1979
6301 AAG ATA CCA GTC GAG GAG ATG AAG AAT AAC ATG CTC GTC TTT GTG CCC ACC AGG AAC ATG GCG GTC GAA GAG GCG GCA AAG AAA TTG 6364
1980 Lys Ile Pro Val Glu Glu Met Lys Asn Asn Met Leu Val Phe Val Pro Thr Arg Asn Met Ala Val Glu Ala Ala Lys Leu 2007
6385 AAG GCC AAA GGA TAC AAC TCG GGC TAC TAC AGC GGA GAG GAC CCA TCT AAC CTG AGG GTG GTG ACG TCG CAG TCC CCA TAC 6468
2008 Lys Ala Lys Glu Tyr Asn Ser Glu Tyr Ser Glu Asp Pro Ser Asn Leu Arg Val Val Arg Val Ser Glu Asp Pro Ser Asn Ile Ser Pro Tyr 2035
6469 GTG GTG GCA ACC AAC GCA ATA GAA TCG GGC GTT ACC CTC CGG GAC CTC CGG GTC GAC GCA CTC AAG TGT GAA 6552
2036 Val Val Val Ala Thr Asn Ala Ile Glu Ser Glu Val Met Pro Asp Leu Asp Val Val Asp Thr Gly Leu Lys Cys Glu 2063
6553 AAA AGA ATC CGA CTG TCA CCC AAG ATG CCT TTC ATA ATG ATG AAC CGC CGC CTC AAA AGA ATG GCA GTC ACT ATT GGG GAA CAA GCC CAG 6636
2064 Lys Arg Ile Arg Leu Ser Pro Lys Met Pro Phe Ile Val Thr Gly Leu Lys Arg Met Ala Val Val Asp Thr Ile Gly Glu Glu Ala Gln 2091
6637 AGA AGA GGG AGG GTT GGA AGA GTG AAG CCC GGG AGA TAC TAC AGG AGT CAA GAA ACA CCT GTC GGC TCT AAA GAC TAC CAT TAT 6720
2092 Arg Arg Gly Arg Val Gly Arg Val Lys Pro Gly Arg Tyr Tyr Arg Ser Glu Glu Thr Pro Val Gly Ser Lys Asp Tyr His Tyr 2119
6721 GAC TTA TTG CAA GCC CAG AGG TAC GGC ATA GAA GAT GGG ATA ATT ATC ACC AAA TCC TTC AGA GAG ATG AAC TAC GAC TGG AGC 6804
2120 Asp Leu Glu Ala Glu Arg Tyr Gly Ile Glu Asp Gly Ile Asn Ile Thr Lys Ser Phe Arg Glu Met Asn Tyr Asp Trp Ser 2147
6805 CTT TAT GAG GAA GAT AGC CTG ATG ATC ACA CAA CTG GAA ATC CTC AAC AAC CTG TTG ATA TCA GAA GAG CTG CCG ATG GCA GTC 6868
2148 Leu Tyr Glu Glu Asp Ser Leu Met Ile Thr Glu Leu Glu Ile Leu Asn Leu Leu Ile Ser Glu Glu Leu Pro Met Ala Val 2175
6889 AAA AAA ATT ATA ATG GGC AGG ACC GAC CAC CCA ATT CAA CTC GCG TAT AAC AGC TAC GAG ACA CAG ATG CCG GTC TTA TTC 6972
2176 Lys Asn Ile Met Ala Arg Thr Asp His Pro Glu Pro Ile Glu Leu Ala Tyr Asn Ser Tyr Glu Thr Glu Val Pro Val Leu Phe 2203
6973 CCA AAA ATA AGA AAT GGA GAG GTG ACT GAT ACT TAC GAT ATT TAC ACC TTC CTC AAT GCA AGA AAA TTG GGA GAT GAC GTC CCC 7056
2204 Pro Lys Ile Arg Asn Gly Glu Val Thr Asp Thr Tyr Asp Asn Tyr Thr Phe Leu Asn Ala Arg Lys Leu Gly Asp Asp Val Pro 2231
7057 CCC TAC GTC TAT GCT ACA GAG GAT GAG GAC TTG GCA GTC GAA CTC TTG GGC CTA GAT TGG CCC GAC CCA GGA AAC CAA GGC ACC 7140
2232 Pro Tyr Val Tyr Ala Thr Glu Asp Glu Asp Leu Ala Val Glu Leu Asp Trp Pro Asp Trp Pro Asp Gly Asn Glu Gln Gly Thr 2259

7141 GTC GAA GCT AGA GCA CTA AAA CAG GTG GTT GGT CTA TCA ACA GCA GAG AAC GGC CTC GTC GCC CTC GTC TAC GTC
 2260 Val Glu Ala Gly Arg Ala Lou Lys Glu Val Val Gly Leu Ser Thr Ala Glu Asn Ala Lou Lou Val Ala Lou Phe Gly Tyr Val
 7225 GGG TAC CAG GCG CTT TCA AAG AGA CAT ATA CCA GTG GTC ACA GAT ATA TAT TCA GAA GAT CAC AGG CTA GAG GAC ACT ACC
 2288 Gly Tyr Glu Ala Lou Ser Lys Arg His Ile Pro Val Val Thr Asp Ile Tyr Ser Val Glu Asp His Arg Lou Glu Asp Thr Thr
 7309 CAC CTA CAG TAT GCT CGG AAT GCC ATC AAG ACG GAG GGG AAG GAA ACT GAA TTG AAG GAG CTC GCT CAG GGG GAT GTG CAG AGA
 2316 His Lou Glu Ala Tyr Ala Pro Asn Ala Ile Lys Thr Glu Gly Lys Glu Thr Glu Leu Lys Glu Leu Ala Gln Ile Asp Val Gln Arg
 7393 TGT GTG GAA GCA GAG ACC AAT TAT GCG AGA GAG GGC ATC CAA TTC ATG AAG TCG CAG GCA CTG AAA GTG AGA GAA ACC CCT ACC
 2344 Cys Val Glu Ala Val Ala Arg Glu Gly Ile Glu Phe Met Lys Ser Gln Ala Lou Lys Val Arg Glu Thr Pro Thr
 7477 TAT AAA GAG ACA ATG AAC ACC GTC GCA GAT TAT GTG AAA AAG TTT ATG GAG GCA CTC ACG GAT AGC AAG GAA GAC ATC ATT AAA
 2372 Tyr Lys Glu Thr Met Asn Thr Val Ala Asp Tyr Val Lys Lys Phe Ile Glu Ala Lou Thr Asp Ser Lys Glu Asp Ile Ile Lys
 7561 TAT AGG CGA CGA CAA GCA AGC ACA GCA TGT TAT AGG AGC ATT GGT GCC AGG CTT GGT CAC GAA ACC GCG TTC GCA ACT CTA GTC
 2400 Tyr Gly Lou Trp Gly Ala His Thr Ala Lou Tyr Lys Ser Ile Asp Tyr Val Lys Glu Thr Ala Phe Ala Thr Leu Val
 7645 GTC AAG TGG TGT GCA TTT GGG GAG TCA GAC CAC ATA AAA CAA JCG AGC ACA GAC TTG GTC TAT TAC ATT ATT
 2428 Val Lys Trp Lou Ala Phe Gly Glu Ser Ile Ser Asp His Ile Lys Glu Ala Ala Thr Asp Leu Val Tyr Tyr Ile Ile Ile
 7729 AAC AGA CCT CAA TTC CCA GGA GAC ACA GAA ACA CAA CAA GAA GGG AGA AAA TTT GTC GGC AGC CTC TCA GCT CTA GCG
 2456 Asn Arg Pro Glu Phe Pro Gly Asp Thr Glu Thr Glu Val Glu Pro Ala Lou Ser Leu Ser Ala Ser Ala Lou Ala
 7813 ACT TAT ACA TAC AAG AGC TGG AAC TAC ATT ATT CTG TCC AAA ATA GTC GAA CCA GCT ATT GCT ACC CTC CCC TAT GCC GCT AAA
 2484 Thr Tyr Thr Tyr Lys Ser Trp Asn Tyr Asn Asn Ile Val Glu Pro Ala Lou Pro Tyr Ala Ala Thr Lou Pro Tyr Ala Ala Lys
 7897 GCC CTC AAG CTA TTT GCT CCT ACC CGA CTC GAG AGC GTC ATA CTC AGC ACT ACA ATC TAC AAA ACA TAC CTA TCA ATA AGG
 2512 Ala Lou Lys Lou Phe Ala Pro Thr Arg Leu Glu Ser Val Val Ile Leu Ser Thr Ala Ile Tyr Lys Thr Tyr Lou Ser Ile Arg
 7981 CGA GGC AAA ACT GAT GGT CTC CTA GGT ACA GGG GTC AGC AGG GCG GTC GAA ATT ATG TCA CAA AAC CCA GTC TCT GTG GGT ATA
 2540 Arg Gly Lys Ser Asp Gly Leu Leu Gly Thr Glu Val Ser Ala Met Ser Glu Ile Met Ser Glu Asn Pro Val Ser Val Gly Ile
 8065 GCA ATT ATG CTA AGG AGA ACT GTC GCA GGC CAC AAT GCA ATT GAA ACC AGT GAG CAA AAA AGA ACA CTA CTT ATG AAA GTC
 2568 Ala Val Met Lou Glu Val Gly Ala Val Ala His Asn Ala Ile Glu Ala Ser Glu Lys Arg Thr Lou Leu Met Lys Val

8149 TTT GTG AAA AAC TTC TTA GAC CAG GCC ACC GAC GAA CTA GTC AAA GAG AGC CCT GAG AAA ATA ATA ATG GCT TTG TTC GAA 8232
2596 Phe Val Lys Asn Phe Leu Asp Glu Ala Thr Asp Glu Leu Val Asp Glu Lys Ser Pro Glu Lys Ile Ile Met Ala Leu Phe Glu 2623

8233 GCG GTG CAA ACG GTG GGC AAC CCT CTT AGA TTA GTG TAC CAC CTC TAT GGA GTT TTC TAT AAA GGG TGG GAA GCA AAA GAG TTG 8116
2624 Ala Val Glu Thr Val Gly Asn Pro Leu Arg Leu Val Tyr His Leu Tyr Gly Val Phe Tyr Lys Glu Ala Lys Glu Leu 2651

8317 GCC CAA AGA ACA GGC GGG AAC CCT TTC ACC GTG ATA ATG TTC GAG GCT GTG GAA CTA CTC GGA GCA GAC AGT GAG GGA AAA 8400
2652 Ala Glu Arg Thr Ala Gly Arg Asn Leu Phe Thr Leu Ile Met Phe Glu Ala Val Glu Leu Lys Val Asp Ser Glu Glu Lys 2679

8401 ATT CGC CAA CTA TCG AGC AAT TAC ATA CTA GAG CTC TTG TAT AAG TTC CGC GAC AAT ATC AAG TCT AGT GTG AGG GAG ATA GCA 8484
2680 Ile Arg Glu Leu Ser Ser Asn Tyr Ile Leu Glu Leu Lys Phe Arg Asp Asn Ile Lys Ser Ser Val Arg Glu Ile Ala 2707

8485 ATC AGC TGG GCC CCC GGC CCC TTT AGT TGC GAT TGG ACA CCA ACA GAT GAC AGA ATA GGG CTT CCC CAT GAC ATC TAC CTC CGA 8568
2708 Ile Ser Thr Ala Pro Ala Pro Phe Ser Cys Asp Trp Thr Pro Thr Asp Asp Arg Ile Lys Glu Leu Pro His Asp Asn Tyr Leu Arg 2735

8569 GAG GAG ACA AAG TGC CCC TGT AGT TAC AGG ATG Asn GCG GTC AAA AAC TGC GCT GGA GAG TGG AGA CTT CTG GAG GAA GGG GGT 8652
2736 Val Glu Thr Lys Cys Pro Cys Gly Tyr Arg Met Lys Ala Val Lys Asn Cys Ala Glu Glu Lys Leu Arg Leu Glu Glu Glu Glu 2763

8653 TCA TTC CTC TGC AGA AAT AAA TTC GGT AGA GGC TCA CAA AAC TAC AGG GTG ACA AAA TAC TAT GAT GAC AAT TTA TCA GAA ATA 8736
2764 Ser Phe Leu Cys Arg Asn Lys Phe Gly Arg Gly Ser Glu Asn Tyr Arg Val Thr Lys Tyr Asp Asn Leu Ser Glu Ile 2791

8737 AAA CCA GTC ATA AGA ATG GAA CAC GTG GAA CTG TAT TAC AGG GGG GCC ACT ATC AAA CTC GAT TTT AAC AAC AGT AAA AGC 8820
2792 Lys Pro Val Ile Arg Met Glu Gly His Val Glu Leu Tyr Tyr Lys Glu Ala Thr Ile Lys Leu Asp Phe Asn Asn Ser Lys Thr 2819

8821 GTC CTG GCA ACT GAC AAA TGG GAG GTT GAC CAC TCC ACC CTC GTT AGG GCA CTC AGG TAC ACA AGG ACT GGA TAT CGA GGG 8904
2847 Val Leu Ala Thr Asp Lys Trp Glu Val Asp His Ser Thr Leu Val Arg Ala Leu Lys Arg Tyr Thr Glu Ala Gly Tyr Arg Gly 2847

8905 GCG TAT TTG GAT GAG AAA CCT AAC CAT CTG ATA CAG AGA GAC TGT GCA AGG ATT ACC AAA GAC AAG GTC TGC TTC ATC 8988
2848 Ala Tyr Leu Glu Glu Lys Pro Asn His Lys His Leu Ile Glu Arg Asp Leu Ser Leu His Asn Leu Thr Arg Leu Ile Glu Leu Val His Asn Asn 2875

9003 CGG GAA GAT AGA GAA ATC CCT GCT GTC GAC TCC CTC CAC AAC CTT ACC CGG CTA ATC GAA TTG GCA GAC AAG ATC 9072
2904 Leu Glu Asp Arg Glu Ile Pro Ala Val Thr Thr Phe Leu Ala Tyr Thr Phe Val Asn Glu Asp Ile Glu Thr Ile Lys 2931

9157 CCA ACT TTT GGG GAA AAG GTG ACA CGG GAG AAA CAA GAG GAG GCA GTC TTG CAG CCT ACT GTC GAC ACA ACA GAT GTA 9240
2932 Pro Thr Phe Gly Glu Lys Val Lys Val Thr Pro Glu Lys Glu Glu Val Val Pro Ala Val Val Asp Thr Thr Asp Val 2959

9241 GCC GTG ACC GTG GTA GGG GAA ACC TCT ACT ATG ATT ACA GGG GAG ACC CCG ACA ACA TTT ACC AGC TTA GGT TCG GAC TCG AAC 9324
2960 Ala Val Thr Val Val Gly Glu Thr Ser Thr Met Thr Gly Glu Thr Pro Thr Thr Pro Ser Leu Gly Ser Asp Ser Lys 2987

9325 GTC CGA CAA GTC CTG AAG CTG GGC GTC GAC GAT GGT CAA TAC CCC GGG CCT ATT CAG CAG AGA GCA AGC CTC CTC GAA GCT ATA 9406
2988 Val Arg Glu Val Leu Lys Leu Gly Val Asp Asp Gly Glu Tyr Pro Gly Pro Asn Gln Arg Ala Ser Leu Glu Ala Ile 3015

9409 CAA GGT GTG GAT GAA AGG CCC TCG GTA CTG ATA CTC AGG TCT GAT AAG GCC ACC TCC AAT AGG GTC AAG ACC GCA AAG ATG ATG 9492
3016 Glu Gly Val Asp Glu Arg Pro Ser Val Leu Ile Leu Gly Ser Asp Lys Asn Thr Ser Asn Arg Val Thr Ala Lys Asn Val 3043

9493 AAG ATA TAT AGG AGC GAC CCC CTG GAA CTG AGA GAA ATG ATG AAA AGG GGA AAA ATC CTA GTC GAA GCC TTA AGT GTC 9576
3044 Lys Ile Tyr Arg Ser Arg Asp Pro Leu Glu Leu Arg Glu Met Met Lys Arg Gly Lys Ile Leu Val Val Ala Leu Ser Arg Val 3071

9577 GAT ACC GCT CTG CTG AAA TTC GTT GAT TAC AAA GGC ACC TTC CTA ACC AGA GAG ACC CTA GAG GCA TTA ATG ATG ATG ATG CCT 9660
3072 Asp Thr Ala Leu Lys Phe Val Asp Tyr Lys Glu Thr Phe Leu Thr Arg Glu Thr Leu Glu Ala Leu Ser Leu Glu Lys Pro 3099

9661 AAG AAA AGA GAC ATA ACT AAA GCA GAA CAA TGA TGA CTC GAA GAC CAA ATA GAA GAA GAG CTC CCT GAC TGG TTC GCA 9744
3100 Lys Lys Arg Asp Ile Thr Lys Ala Glu Ala Glu Leu Arg Leu Glu Asp Glu Ile Glu Glu Leu Pro Asp Trp Phe Ala 3127

9745 GCC AAG GAA CCC ATA TTT CTA GAA GCC AAC ATT AAA CTC GAC AAG GAG ATT CTC GTC GAA CCC GGG GAC ATA GGC ACT ATT AAA GAA ALA 9828
3128 Ala Lys Glu Pro Ile Phe Leu Glu Ala Asn Ile Lys Arg Asp Lys Tyr His Leu Val Glu Asp Ile Ala Thr Ile Lys Glu Lys 3155

9829 GCC AAA CAA CTG GGG GCA ACA GAC TCC ACA AAG ATA TCA AAG GAG ATT GGC GCG AAA GTC TAT TCT ATT AAG CTC AGT AAC TGG 9912
3156 Ala Lys Glu Leu Glu Ala Thr Asp Ser Thr Lys Ile Ser Lys Glu Val Glu Ala Lys Val Tyr Ser Met Lys Leu Ser Asn Trp 3163

9913 GTG ATA CAA GAA GAG ATT AAA CAA GGC AGC CTT GCC CCC CTG TTT GAA GAG CTC CTG CAA CAG TAC CCA CCC GGG GGC CAG AAC 9996
3164 Val Ile Glu Glu Glu Asn Lys Glu Asn Lys Glu Leu Ala Pro Leu Phe Glu Glu Leu Leu Gln Gln Cys Pro Pro Glu Gly Gln Asn 3211

9997 AAA ACC ACA CAT ATG GTC TCA ACC TAC CAA CTA GCT CAA GGG ATT TGG ATG CCA ATT ATG TGG CAC GTG TTC ATG GGG ACC ATA 10080
3212 Lys Thr Thr His Met Val Ser Ala Tyr Glu Ala Glu Asn Trp Val Pro Val Ser Cys His Val Phe Met Gly Thr Ile 3239

10081 CCC GCC AGA AGA ACC AAG ACT CAT CCT TAT GAG GCA TAC GAT GAA CAT ATT ATG AAG GCA TTA 10164
3240 Pro Ala Arg Arg Thr His Pro Tyr Glu Ala Tyr Val Lys Leu Arg Glu Leu Val Asp Glu His Lys Met Lys Ala Leu 3267

10165 TGT GGC GGA TCA GGC CTA AGT AAG CAC AAC GAA TAT CAA GGA AAC GTC AGG ACC AAA CAC ATG 10246
3268 Cys Gly Gly Ser Gly Leu Ser Lys His Asn Glu Trp Val Ile Gly Lys Tyr Glu Lys Asn Leu Arg Thr Lys His Met 3295

10249 TGG AAC CCC GGA AAG GTG GCG GAG CAA CTG CAC AGA GAA CCC TAT AGT AAC ATA GGT TCA GTG ATG 10332
1296 Leu Asn Pro Glu Lys Val Ala Glu Glu His Arg Glu Glu Tyr Arg His Asn Val Tyr Asn Lys Thr Ile Gly Ser Val Met 1123

10333 ACA GCA ACT GGT ATC AGG CTG GAG AAG TTA CCT GTG GTT AGG GCC CAA ACA GAC ACA ACC AAC TTC CAC CAA QCA ATA AGG GAT 10416
3324 Thr Ala Thr Glu Ile Arg Leu Glu Asn Leu Pro Val Arg Ala Glu Thr Asp Thr Asn Phe His Glu Ala Ile Arg Asp 3351

10417 AAA ATA GAC AAG GAG GAG AAC CTA CAG ACC CCT GGT TTG CAT AAG TTA ATG GAA GTC TTC AAT QCA TTA AAA AGA CCC GAG 10500
3352 Lys Ile Asp Lys Glu Glu Asn Leu Glu Asn Leu Glu Pro Glu Leu His Lys Lys Leu Met Glu Val Asn Ala Leu Lys Arg Pro Glu 3379

10501 CTT GAG GCC TCT TAT GAC GCT GGT TTG GAT TGG GAG GAA ATA AAT AGG AAG GGT GCT GGT TTC TTC GAA CGC 10584
3380 Leu Glu Ala Ser Tyr Asp Ala Val Asp Trp Glu Glu Leu Glu Arg Glu Ile Asn Arg Lys Glu Ala Ala Gly Phe Phe Glu Arg 3407

10585 AAG AAC ATA GGA GAG GAT TTG GAT TGG GAT TGG GAA AAA GTC GAA GAG GAT ATT AAC AGT TTG AAA AAA GGT AGG AAC ATC AGA 10668.
3406 Lys Asn Ile Gly Glu Val Val Asp Ser Glu Lys Asn Lys Val Glu Glu Val Ile Asp Ser Leu Lys Lys Gly Arg Asn Ile Arg 3415

10669 TAC TAC GAA ACT GCA ATC CCC AAA AAC GAG AAG AGG GAT GTC AAT GAT GAC TGG ACC GCT GGT AAC TAC GAA GAT GAG AAC 10752
3436 Tyr Tyr Glu Thr Ala Ile Pro Lys Asn Glu Lys Arg Asp Val Asn Asp Asp Trp Thr Ala Gly Asp Phe Val Asp Glu Lys Lys 3463

10753 CCA AGA GTG ATA CAA TAC CCT GAG GCT AAA ACT AGG TTG GCT ATT ACT AAG GTA ATG TAC AAC TAG GAT CAA TTC GAA AAC CCT 10836
3464 Pro Arg Val Ile Glu Tyr Pro Glu Ala Lys Thr Arg Leu Ala Ile Thr Lys Val Met Tyr Lys Trp Val Lys Glu Lys Pro Val 3491

10837 GTC ATA CGG GGT TAT GAA GGT AAG ACA CCC CTG TTT CAA ATT TTT GAC AAA GTC AAC AAA GAA TAG GAT CAA TTC CAA AAC CCT 10920
3492 Val Ile Pro Glu Tyr Glu Glu Lys Thr Pro Leu Phe Glu Ile Phe Asp Lys Val Lys Glu Trp Asp Glu Pro Glu Asn Pro 3519.

10921 GTG GCA GTT AGC TTT GAT ACC AAA GCG TGG GAT ACC CAG GTA ACC ACA AGG GAT TTG GAG CTA ATA AGG GAT ATA CAG AAC TTC 11004
1520 Val Ala Val Ser Phe Asp Thr Lys Ala Trp Asp Thr Glu Val Thr Ile Arg Asp Leu Glu Leu Ile Arg Asp Ile Glu Lys Phe 1547

11005 TAT TTT AAA AAG AAA TGG CAC AAA TTC ATG DAC ACC CTA ACC AAG CAC ATG TCA GAA GAA GTC ATC ATG GCC GAC GGG GAG 11088
3546 Tyr Phe Lys Lys Lys Lys Trp His Lys Phe Ile Asp Thr Leu Thr Lys His Met Ser Glu Val Pro Val Ile Ser Ala Asp Glu Glu 1575

11089 GCA TAC ATA AGG AAA GGT CAG AGA GGC AGT GGG CAA CCT GAC AGC AAC AGC AAC AGC AAC AGC TGG TGG ACA ATG GTC 11172
3576 Val Tyr Ile Arg Lys Glu Arg Glu Ser Glu Pro Asp Thr Ser Ala Gly Asn Ser Met Leu Asn Val Val Thr Met Val 1603

11173 TAT GCC TTC TGG GAG GCC ACC GGG GTC CCC TAC AAA AGT TTT GAC AGA GTC GCA AAC ATC ATG GTC TGG CCC AGT GAT GGT TTC 11256
3604 Tyr Ala Phe Cys Glu Ala Thr Glu Val Pro Tyr Lys Ser Phe Asp Arg Val Ala Lys Ile His Val Cys Glu Asp Asp Glu Phe 1631

11257	CTG ATT ACC GAA AGA GCT CTC GGT GAG AAA TTT GCG AGT AAA GGA GTC CAA ATC CTA TAC GAA GCT GGG AAC CCT CAA AAG ATC	11340
3632	Leu Ile Thr Glu Arg Ala Leu Glu Ile Lys Glu Val Ser Lys Glu Val Glu Ala Ile Lys Pro Glu Lys Ile	3659
11341	ACT GAA GGG GAC AAC ATG AAA GAA GTC GCC TAT GAG TTT GAT GAT ATC GAG TTC TGC TCC CAT ACA CCA GAA GTC AGG TGG TCA	11424
3660	Thr Glu Gly Asp Lys Met Lys Val Ala Tyr Glu Ile Glu Phe Asp Asp Ile Glu Phe Cys Ser His Thr Pro Val Glu Val Arg Trp Ser	3687
11425	GAC AAC ACT TCC AGC TAC ATG CGG GGA AGG AAC ACG ACT ACA	11508
3668	Asp Asn Thr Ser Ser Tyr Met Pro Glu Arg Asn Thr Pro Glu Arg Asn Thr Thr Ile Leu Ala Lys Met Asn Thr Arg Leu Asp Ser Ser Gly Glu	1715
11509	AGG GGT ACT ATA GCA TAT GAG MAG GCA GTG GCG TTC AGC TTT TTG ATG TAC TCC TGG AAC CCA CTG ATC AGA AGG ATA TGC	11592
3716	Arg Gly Thr Ile Ala Tyr Glu Ile Lys Ala Val Ala Phe Ser Phe Leu Leu Met Tyr Ser Trp Asn Pro Leu Ile Arg Arg Ile Cys	3743
11593	TTA CTG TTG TCA ACT GAG TTG CAA GTC AGA CCA GGG AGG TCA ACC ACC TAT TAC TAT GAA GAA GAC CCA ATA TCC GCT TAC	11676
3744	Leu Leu Val Leu Ser Thr Glu Leu Glu Val Val Arg Pro Gly Lys Ser Thr Thr Tyr Tyr Glu Gly Asp Pro Ile Ser Ala Tyr	3771
11677	AGG GAA GTC ATT GGC CAC AAC CTC TTT GAC CTT AAA AGA ACA AGC TTC GAA AAC CTA GCA AAG TTA AAC CTC AGC ATG TCC ACG	11760
3772	Lys Glu Val Ile Gly His Asn Leu Phe Asp Leu Lys Arg Thr Ser Phe Glu Lys Leu Asn Leu Ser Met Ser Thr	3799
11761	CTC GGG GTG TGG ACT AGA CAC ACT AGC AAC AGA TTA CTA CAA GAT TGT GTC AAC GTT GGC ACC AAA GAG GGC AAC TGG CTG GTC	11844
3800	Leu Gly Val Trp Thr Arg His Thr Ser Lys Arg Leu Leu Glu Asp Cys Val Asn Val Lys Leu Glu Asn Trp Leu Val	3827
11845	AAT GCA GAC AGA CTA GTG AGT AGT AAC AGC AAC GGA AAC AGG TAT ATA CCT GGA GAG GGC CAC ACC CTA CAA GGG AAA CAT TAT GAA	11928
3828	Asn Ala Asp Arg Leu Val Ser Ser Lys Thr Glu Asn Arg Tyr Ile Pro Glu Gly His Thr Leu Glu Gly His Tyr Glu	3855
11929	GAA CTG ATA GCA AGG AAA CCG ATC GGT AAC TTT GAA GGG ACC GAT AGG TAT AAC TTG GGG CCA ATA GTC ATG GTG TTG	12012
3856	Glu Leu Ile Leu Ala Arg Lys Pro Ile Glu Phe Glu Gly Thr Asp Arg Tyr Asn Leu Gly Pro Ile Val Asn Val Val Leu	1683
12013	AGG AGA CTA AAA ATT ATG ATG ATG GCC CTC ATA GGA AGG GGG GTG TGA GCA TGG TTA GCC CTT GAT CGG GCC CTA TCA GTA GAA	12096
3864	Arg Arg Leu Lys Ile Met Met Ala Leu Ile Glu Arg Glu Val End	1699
12097	CCC TAT TGT AAA TAA CAT TAA CTT ATT ATT ATT TTA ATT ATT TAT TTA ATT ATT ATT TTA GAT ACT ATT ATT TTA TTT ATT ATT ATT	12180
12101	GTA CAA ACT ACC TCA TAT TAC CAC ACT ACA CTC ATT TTA ACA GCA CTT TAG CTG GAG GGA AAA CCC TAA CGT CCA CAG TTG GAC	12264

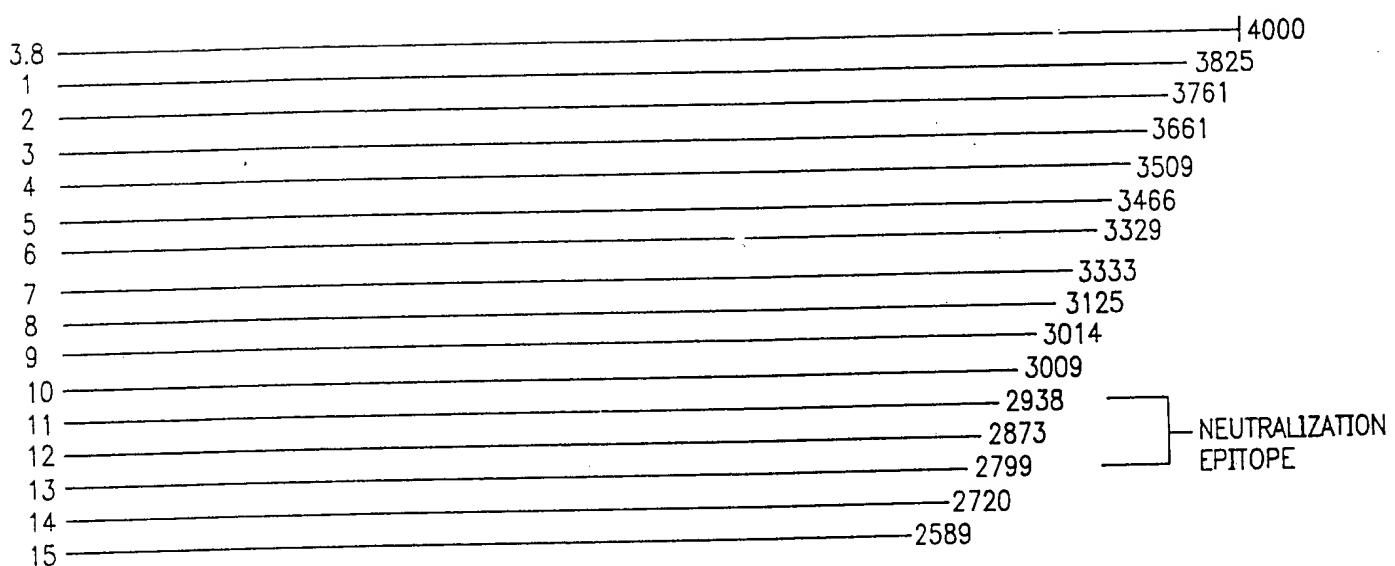


FIG. 2 (Formerly figure 4)

Figure 3. Nucleotide sequence.

HCV

AGTGACAACGGCACTAATGGTATTCA CGAGCCATGTATCTAGAGGGGTTAACAGG
AGCTTACATGGATCTGGCCCGAGAAAATATGCAAGGGGGTCCCCACTCATCTGGCC
ACTGACACCGGAAGTAAAGAGATA CGCGGGATGATGGATGCCAGCGAGAGGACAAAC
TATA CGTGCTGTAGGTTACAAAGACATGAATGGAACAAACATGGATGGTGTAACTGG
TACAACATAGACCCTGGATTCA GTTAATGAACAGGACCCAAACAAATTGACAGAA
GGCCCTCCAGATAAG

Deduced amino acid sequence.

HCV S D N G T N G I Q R A M Y L R G V N R S
L H G I W P E K I C K G V P T H L A T D
T E L K E I R G M M D A S E R T N Y T C
C R L Q R H E W N K H G W C N W Y N I D
P W I Q L M N R T Q T N L T E G P P D K

Figure 4

